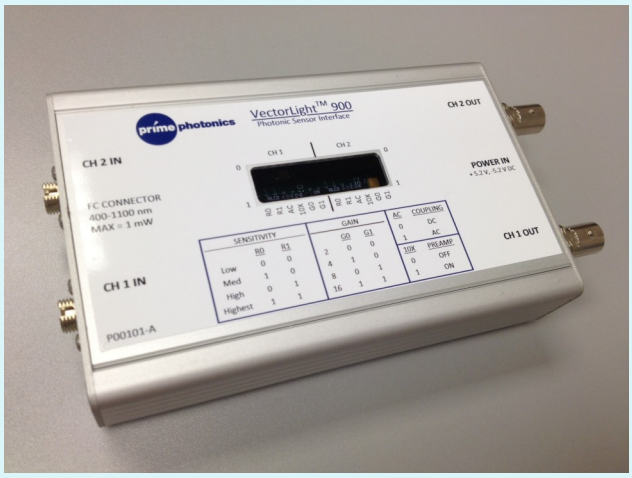
VL900 Photodiode Amplifier Module

Features and Specifications

The VL900 is a two-channel fiber-coupled photodiode amplifier module with user-selectable coupling and a wide range of user-adjustable gain settings. The module is an easy way to capture low-level fiber optic signals, amply them, and capture the signals using standard data acquisition (DAQ) hardware. The standard configuration uses FC/PC connectors and a Thor Labs FDS-02 silicon PIN type PD with a sensitivity of 0.47 A/W at 725nm. The module requires external power supplied between +/-5V and +/-6V.



Specifications

Dimensions: 5.75”L x 3.06”W x 1.21” H
Weight: 240g
Power: +5V input, 200mA max
-5V input, 150mA max

Gain Linearity within one range: 2%
Gain Linearity range to range at the same gain: 5%
DC Offset Voltage at minimum gain: +/-4mV
DC Offset Voltage at maximum gain: +/- 160mV
Output Voltage Swing into 1MOhm: +/-3.5V

Typical AC Characteristics at Minimum Gain

Range	Overall Gain	Rise Time (ns)	Bandwidth (MHz)	RMS Noise (uV)	NEP (W/rtHz)
0	20000	51	6.86	208	7.04E-12
1	40000	100	3.47	215	5.12E-12
2	60000	151	2.32	220	4.27E-12
3	80000	191	1.83	222	3.64E-12

Typical AC Characteristics at Maximum Gain

Range	Overall Gain	Rise Time (ns)	Bandwidth (MHz)	RMS Noise (mV)	NEP (W/rtHz)
0	1600000	72	4.86	6.6	3.32E-12
1	3200000	114	3.07	7.6	2.40E-12
2	4800000	162	2.16	8.5	2.14E-12
3	6400000	200	1.75	8.9	1.86E-12

Notes:

1. AC characteristics measured with a 100KHz square wave with a rise time of less than 6 ns.
2. Full scope bandwidth of 600MHz used for rise time measurements.
3. Noise measurements made with a 20MHz bandwidth.

CONTACT: **PRIME PHOTONICS**
1116 SOUTH MAIN ST
BLACKSBURG, VA 24060
+1 (540) 961.2200

WWW.PRIMEPHOTONICS.COM
INFO@PRIMEPHOTONICS.COM